UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,291	07/18/2000	Gopal S. Krishna	95-320	8015

20736	7590	12/30/2003

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EXAMINER
CALDWELL, ANDREW T

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/618,291	KRISHNA, GOPAL S.
	Examiner	Art Unit
	Andrew Caldwell	2151

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *18 July 2000*.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-17* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

1   *Remarks*

2   Claims 1-17 are pending.

3   At claim 6 line 3, there appears to be a typographical error. The word "threshold"

4   should be "thresholds."

5

6   *Claim Rejections - 35 USC § 102*

7   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

8   form the basis for the rejections under this section made in this Office action:

9   A person shall be entitled to a patent unless –

10   (e) the invention was described in (1) an application for patent, published under section 122(b), by
11   another filed in the United States before the invention by the applicant for patent or (2) a patent
12   granted on an application for patent by another filed in the United States before the invention by the
13   applicant for patent, except that an international application filed under the treaty defined in section
14   351(a) shall have the effects for purposes of this subsection of an application filed in the United States
15   only if the international application designated the United States and was published under Article 21(2)
16   of such treaty in the English language.
17
18

19   Claims 1-3 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated

20   by Fawaz et al., U.S. Patent App. Pub. 2003/0133406 A1.

21

22   Regarding claim 1, Fawaz anticipates the claimed invention by disclosing a

23   method comprising:

24   First determining a priority for a data frame received on a network switch

25   port (pars. 51-53 SLA as priority);

26   Second determining a depletion of network switch resources (pars. 78-79;

27   Fig. 10);

Selectively outputting a flow control frame on the network switch port

based on the determined depletion of network switch resources relative to the

determined priority (pars. 78-79; Fig. 10).

Regarding claim 2, Fawaz teaches a method wherein the first determining step

includes determining the priority for the data frame at the network switch port (pars. 51-

53).

Regarding claim 3, Fawaz teaches a method further comprising storing the

determined priority within a table configured for storing the determined priority for each

of a plurality of the network switch ports (Fig. 6 elem. 318).

Regarding claims 12-13, they are apparatus claims corresponding to method

claims 1-2, respectively. Since they do not teach or define above the information in the

corresponding method claim, they are rejected under the same basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-11, and 14-17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Fawaz.

1

2   Regarding claim 4, Fawaz teaches the invention substantially as claimed. See

3   the rejection of claim 3 above. Fawaz does not explicitly teach a method in which the

4   second determining step includes determining whether an availability of the network

5   switch resources falls below a first prescribed threshold value. Rather, Fawaz teaches

6   a method which operates on the basis of the number of occupied buffers (par. 78

7   "occupancy ... exceeds some threshold H"). When the number of occupied buffers is

8   greater than a certain amount, Fawaz initiates congestion control. In any system, the

9   total number of buffers is equal to the number of occupied buffers plus the number of

10   available buffers. Given this fact, it would have been obvious to one of ordinary skill in

11   the art at the time the invention was made to modify the system of Fawaz to operate on

12   the basis of buffer availability as opposed to buffer occupancy based on simple

13   mathematical reasoning. In the modified method, the second determining step would

14   determine whether an availability of the network switch resources falls below a first

15   prescribed threshold value.

16   Regarding claim 5, Fawaz teaches a method further comprising setting the first

17   prescribed threshold value based on a user-defined priority threshold (par. 57 H).

18   Regarding claim 6, Fawaz teaches a method where the setting step includes

19   setting a plurality of prescribed threshold values, including the first prescribed threshold

20   value, based on a plurality of user-defined priority thresholds, respectively (par. 57 H is

21   SLA specific).

22   Regarding claim 7, Fawaz teaches a method wherein:

1   The first determining step includes determining the priority from a plurality

2   of available priority values (Fig. 6 elem. 318 showing multiple SLAs);

3   The second determining step includes determining whether the availability

4   of the network resources has fallen below an identified one of the prescribed

5   threshold values (see the reasons for rejection of claim 4);

6   The selectively outputting step includes identifying from the table the

7   network switch ports having respective priority values less than the

8   corresponding user-defined priority threshold for the identified one prescribed

9   threshold value (par. 57).

10   Regarding claim 8, Fawaz teaches a method wherein the step of setting the

11   plurality of prescribed threshold values includes storing the prescribed threshold values

12   and the respective user-defined priority thresholds in a second table (par. 57).

13   Regarding claim 9, Fawaz does not explicitly teach a method further comprising

14   deleting the determined priority from the table after a prescribed aging interval. Official

15   notice is hereby taken of the fact that aging table entries is a known technique for

16   eliminating no longer used entries. It would have been obvious to one of ordinary skill in

17   the art at the time the invention was made to modify the method of Fawaz to include the

18   step of deleting the determined priority from the table after a prescribed aging interval

19   because it would allow the system to handle the situation where an SLA was not

20   properly shut down.

21   Regarding claim 10, it introduces the same limitations as claim 6, so it is rejected

22   for the same reasons.

1   Regarding claim 11, it introduces the same limitations as claim 7, so it is rejected

2   for the same reasons.

3   Regarding claims 14-17, they are apparatus claims corresponding to method

4   claims 4-5, 7, and 9, respectively. Since they do not teach or define above the

5   information in the corresponding method claim, they are rejected under the same basis.

6

7   *Conclusion*

8   A shortened statutory period for response to this action is set to expire three
9   months from the mail date of this letter. Failure to respond within the period for
10   response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P.
11   710.02, 710.02(b)).
12
13   Any inquiry concerning this communication or earlier communications from the
14   examiner should be directed to Andrew Caldwell, whose telephone number is (703)
15   306-3036. The examiner can normally be reached on M-F from 9:00 a.m. to 5:30 p.m.
16   EST.
17
18   If attempts to reach the examiner by phone fail, the examiner's supervisor,
19   Glenton Burgess, can be reached at (703) 305-4792. Additionally, the fax numbers for
20   Group 2100 are as follows:
21
22   Fax Responses: (703) 872-9306
23
24   Any inquiry of a general nature or relating to the status of this application should
25   be directed to the Group receptionist at (703) 305-9600.
26
27
28   *Andrew Caldwell*
29
30
31
32   Andrew Caldwell
33   703-306-3036
34   December 22, 2003